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ABSTRACT

The purpose of this study is to investigate the acquisition of discipline-specific literacy in a second language, specifically how English-as-a-Second-Language (ESL) nursing students learn to write successfully in the B.S. nursing program at the College of St. Catherine in St. Paul, Minnesota. It is hoped that lessons from this longitudinal study will be useful to other nursing programs that have had little success in getting their ESL students through their program. This study, which began in the fall of 1999, follows three nursing students who are non-native speakers of English through the completion of their written assignments in their first and second year nursing courses. Data were collected through interviews with students and instructors, and through a content analysis of course syllabi, assignment handouts, students' papers, and instructors' written feedback. Preliminary findings suggest the importance of clear and consistent guidelines for assignments, handouts and tasks that break tasks down into manageable chunks, a process approach that allows for extensive written feedback from instructors and input form classmates, explicit criteria for evaluation, and repeated practice of new genres in a variety of contexts. Appendices with study data are included. (Contains 12 references.) (KFT)

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ED 454 707

First-Year Report
Writing in Nursing Project

Discipline-Specific Literacy in a Second Language: How ESL Students Learn to Write Successfully in a B.S. Degree Nursing Program

March 26, 2001

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In recent years an increasing number of culturally diverse students, including non-native speakers of English, have enrolled in A.S. and B.S. nursing programs (Davidhizar, Dowd, & Giger, 1998; Furuta & Lipson, 1994; Malu & Figlear, 1998; Shearer, 1989), as well as graduate nursing programs (Templeton Gay, Estes Edgil, & Stullengarger, 1993) across the United States. Once they enter nursing, however, many of these students have difficulty succeeding academically in their program (Smukler & Kramer, 1996; Wong & Wong, 1982). Language difficulties are often cited as one of the factors which contribute most to students' attrition (Swiggum & Slette, 1997), especially if students have not developed full academic proficiency in their native language (Malu & Figlear, 1998). One area of difficulty that has been consistently mentioned by faculty in the B.S. degree nursing program at the College of St. Catherine, St. Paul, MN, is academic writing skills.

In addition, there are discipline-specific literacy skills or genre knowledge (Johns, 1997) that second-language students need to acquire in the field of nursing, just as native speakers must do. Studies have shown that success in discipline-specific writing is related to the student's ability "to internalize the discipline's knowledge claims and institutional culture" (Parks & Maguire, 1999, p. 148) through a process that is "collaboratively accomplished through socialization into the ways of doing, seeing, and valuing particular to the discipline" (Parks & Maguire, 1999, p. 148). The acquisition of discipline-specific writing skills can be quite complicated for second-language students because such knowledge is often based on assumptions that are not made explicit, but rather must be learned through a hit-and-miss process in a language and within a larger cultural context that are not native to the students.

The purpose of this study is to investigate the acquisition of discipline-specific literacy in a second language, specifically how ESL nursing students learn to write successfully in the B.S. degree nursing program at the College of St. Catherine. Despite the increasing numbers of culturally and linguistically diverse students in nursing programs across the U.S., there is little substantive knowledge about why some ESL nursing students succeed academically and others do not. In conversations over the past three years, the head of the nursing department and various nursing faculty members have indicated that ESL students have considerable difficulty with their written assignments. It is hoped that a longitudinal study which focuses specifically on writing in the nursing program will provide some insight into this area of concern.

Description of the Study

The study, which began in the Fall of 1999, follows three nursing students who are non-native speakers of English through completion of the written assignments in their 1st and 2nd-year nursing courses. Data are being collected using the following methods: 1) interviews with the students to discuss their understanding of the written assignments, as well as their questions and concerns, and the processes and strategies they use in completing them; 2) interviews with nursing instructors to learn more about their expectations for assignments and to review their comments on students' papers; and 3) document analysis of course syllabi, assignment handouts, students' papers, and instructors' written feedback. Students are also asked to complete a questionnaire about their educational background. First-semester nursing course labs, during which the written assignments were presented and discussed,

were also observed in Fall, 1999.

There are currently three participants in the study: one student who is in the last semester of her 2nd year and two others who are in the second semester of their 1st year, one of whom participated in the study in Fall, 1999, but did not progress to her second semester until Winter, 2001. This first-year report will discuss only the two participants who began in the study in Fall, 1999, and their written work in the nursing program during the academic year 1999-2000. These two students represent very different second-language and cultural backgrounds. One student, Thinlay (a pseudonym), is Tibetan, but was born and grew up in Nepal; she attended Tibetan schools, where the language of instruction was both English and Tibetan, and two years of college in India. This student had been in the U.S. for 3 ½ years at the time the study began; she had taken an ESL speaking class and courses in college reading and writing at a local community college before beginning her coursework as a junior at the College of St. Catherine. She scored an 86 on the in-house English Proficiency Test (EPT), placing out of ESL coursework. The EPT consists of the Michigan Test of English Language Proficiency (MTELP), Listening Comprehension Test (LCT), and a 30-minute essay. The score of 86 is the average of her scores for the MTELP and the LCT. For reasons unrelated to her language proficiency, Thinlay did not successfully complete the pathophysiology course her first semester, and was not able to continue in the program the second semester. She has been accepted for re-admission in Fall, 2000 and upon successful completion of the pathophysiology course, will continue with this project in Winter, 2001. Thus, her participation in this project has so far been limited to her first-semester coursework.

The second student, Finda (a pseudonym), is from Liberia, where she grew up speaking Liberian English. She completed high school in her native country before coming to the U.S. She had been in the U.S. for 7 years at the time the study began; she scored a 77 on the English Proficiency Test and took two ESL courses in academic reading and writing at the College of St. Catherine before beginning her first year in the nursing program.

During the first semester in the B.S. degree nursing program, there are seven written assignments. In one course, Theoretical Concepts in Professional Nursing, students write a 1-page paper on their philosophy of nursing, supported by appropriate references to the literature In another course, Introduction to Professional Nursing Practice, students complete six written assignments, most of which are based on client assessments and which prepare students for Clinical Thinking Worksheets, the most important type of written assignment the second semester. Three assignments: the preschool developmental screening, elderly/assistive living assessment, and Health Speak elementary school teaching project, are completed with a partner. The cultural assessment and adolescent assessment are individual projects, as is the last assignment in the course, a clinical thinking worksheet. Last year, only the cultural assessment and the elderly assessment required a formal write-up of the findings; the other four assignments could be handwritten and consisted of various short-answer responses, from single words to several paragraphs.

During the second semester in the program, students participate in clinicals for two of their courses: Nursing Management of Clients I and II. In these two courses, they are in two-day clinicals for a total of about 80 hours or 22 mornings, afternoons, or

evenings, in three different settings: medical/surgical, maternity, and an in-house family lab. For each week of clinical, students complete a Clinical Thinking Worksheet (CTW), one for each client they are assigned. They complete six CTW's for medical/surgical, three for maternity, and one for family lab. Each week students are assigned a client with a particular medical diagnosis, which they must research the night before their clinical begins. If they are lucky, they have the same client both days and are able to gather the physiological and psychosocial data necessary to do a thorough job on the CTW's. The second-semester CTW's are 17 pages long; ESL students report spending as much as 10 hours on each of them, including the time it takes to word-process them.

Because of limitations of space, I will focus on one assignment from Fall semester: the Health History and Cultural Assessment assignment, which is the first assignment and the one that most closely resembles an academic research paper, which both students completed, and five CTW's that Finda completed for the medical/surgical rotation in Spring, beginning with the Fall-semester CTW. The cultural assessment papers, written by the two participants, were evaluated by the same instructor, who also evaluated Finda's first CTW. Finda's other CTW's were all evaluated by another instructor.

Health History and Cultural Assessment Assignment

The objectives of the Health History and Cultural Assessment assignment are: to practice interviewing skills; gather health history data in an organized manner; develop an understanding of a culture other than one's own; and, as one instructor added, report findings and analyze data in a written format. Students are asked to

review selected chapters from a course textbook; select an ethnic/cultural group different from their own that is relatively easy to research; conduct an electronic search using CINAHL, an index to journal articles in nursing and allied health; find three nursing journal articles about the selected ethnic/cultural group; interview an individual from that cultural group using a Cultural Assessment form from the course lab manual; and write a 3-5 page paper comparing and contrasting the interview data with the data from the literature search in response to the question: How is your client similar to or different from what you have researched about this ethnic/cultural group?

Additional directions state that papers are to be written in academic style with outside sources appropriately documented using APA format. As one instructor commented: "We do not explain this [academic style] to students. We assume they know what it means as they are juniors," which she referred to as: "our mythical assumption." She also noted that "students often do not know what the words 'cite' or 'citation' mean." She defined "academic style" as referring to: "grammar & style, college level writing skills, and using skills of critical thinking."

In addition to the assignment sheet and cultural assessment form, students are provided with a handout on format for citations and references. They are also given directions for the electronic search portion of the assignment, including instructions for what to submit with the paper. Students are told to submit one article in full-text format, as well as the search itself with abstracts of the other articles. Students are also given a set of questions to answer about the search itself and the full-text article.

To help students with the actual search, a 30-minute presentation is given by the computer specialist from the library, who explains how to do the search, although

the presentation itself takes place in the lecture hall, not the library. At the presentation, students are given handouts on CINAHL and the Nursing Journal Collection via the WWW, as well as how to generate appropriate search terms and find books and articles in the library. In the following discussion of how Thinlay and Finda completed the cultural assessment assignment, the instructor's comments have been placed in bold-face for readability.

Thinlay. In an interview before she completed the assignment, Thinlay, who had not had ESL reading and writing courses at the College of St. Catherine, expressed some confusion about what compare and contrast meant. She wondered if it meant summarizing, though she seemed to have the right idea when she said she thought she would need to find common ground and then think of differences. From her past experiences she knew that it could be difficult finding the right keywords in an electronic search and then finding material that was useful. As a perfectionist, she was concerned about managing the quantity of work in the amount of time given. She stated she would need to read each source one by one and in its entirety to decide if it was useful or not, which would quickly deplete her time. She was also concerned about how to condense the material appropriately. In addition, she wondered about the long list of questions on the Cultural Assessment form, many of which consisted of several related questions under the same bullet. The process of interviewing someone did not worry her, but she wondered how she would select the right questions to ask or whether she was supposed to go through all of them. With regards to the writing process, she said she has difficulty getting started and then gets stuck on how to say something.

In an interview after she completed the assignment, Thinlay said she had first used the keywords "African Americans" and "health-care" in her search even though her interviewee was from Ethiopia. When her search resulted in too many articles, she changed "African Americans" to "Ethiopia." Although students were instructed to do the literature search first, Thinlay began with the interview. She commented that it would have been more helpful to have the information about Ethiopian culture before she did her interview; her questions could then have been more specific. On the other hand, for some issues that came up in the interview, for example, the interviewee's conversion and belief in Pentecostalism, Thinlay could not find any information in her subsequent literature search.

Thinlay's primary source for the paper was an article about pregnancy and delivery practices and beliefs of Ethiopian immigrant women in Israel. In her paper she quoted once and paraphrased three times from this article. In addition, she paraphrased once from two other supporting articles, one about the health beliefs of Ethiopians abroad and the other about caring for Ethiopians in Israel. She used the APA documentation system both in her in-text citations and in the reference list.

For the final paper, which was a little over 2 pages long, Thinlay received full points for the electronic search (5 points), interview (11 points), comparison/contrast of interview data and literature search, using citations in APA format (6 points), and reference list in APA format (2 points), though for the latter the instructor noted that she should single-space within each reference. She lost a point for her conclusion (3 out of 4 points), which did not sum up her findings or generalize from them. The instructor asked: **"Did you find that your client had maintained cultural norms from native**

land, or modify/change beliefs etc since moving to U.S.?" suggesting one way in which the student could have concluded her paper. Summary comments at the end of the paper suggested points that could have been expanded upon, for example, points that were discussed in the interview, but not included in the paper: **"You had some interesting information in your cultural assessment form about the client's family, interaction with others. Could have perhaps expanded on 'her story' ie do any of her other family members live here, etc."** There were also points that were discussed in the article, but not elsewhere: **"Modesty was an important issue for Ethiopian women as expressed in article. Was this topic discussed in your interview?"**

Thinlay also lost a point for academic style (1 out of 2 points). Throughout the paper the instructor marked grammatical errors and at the end of the paper, she wrote: **"Some errors noted in grammar and organization of paper. Please see me if you need any clarification of comments."** The student's final score was 28 out of 30 points. The instructor also wrote at the end: **"Nice job applying information from articles to your client"** and **"Overall, nice job."** Thinlay commented she thought the grade was generous; she tends to write short papers and has difficulty expanding her ideas, even in her native language. She also said she had not had time to have the paper checked at the O'Neill Center for Academic Development before turning it in, a fact that probably contributed to the presence of so many errors in her final draft.

Finda. In an interview after the assignment was completed, Finda reported having difficulty finding what she needed from the literature, even though her reference list contained more than twice the number of required sources. She also expressed

concern about the need to condense materials: "They want you to take a lot of information and put it into condensed form." Finda, who took two ESL classes in college reading and writing at the College of St. Catherine, recognized this directive as quite different from what she had been taught to do in her ESL classes, where the goal is more often to elaborate and expand upon ideas, rather than to condense them. She stated it was not really clear how to do the electronic search and what to submit with the paper. An instructor told her that she needed to have at least three articles, but another had said that more sources, including books, would not hurt. It was also not clear how many and which of the interview questions to use. In addition, she wasn't sure what constituted a citation. She went to the O'Neill Center twice for help with "sentence structure, grammar, punctuation, content, and organization."

Finda's primary source for her cultural assessment of a Japanese student was an article about Japanese staff nurses' perceptions of head nurses' actions. She quoted once from this article and paraphrased once. In addition, she cited eight other sources in her paper, including three books, two about Japanese culture and one about child development and education in Japan; one article about Japanese dietary intake; three articles about health care in Japan; and one article about contemporary nursing in Japan. She quoted these sources six times and paraphrased eight times. She used the APA documentation system both in her in-text citations and in the reference list.

Her final paper, which was 4 ½ pages long, received full points for all aspects of the assignment. Her final grade was 30 out of 30 points. Her teacher wrote: **"You did an incredible amount of research for this paper! Excellent job."** She suggested, however, another way to organize the paper: **"A suggestion would be to have**

applied the data from the interviewee after each topic reviewed," rather than report all the findings of the literature search first, followed by all the data from the interview. **"This may have provided a better context for 'conclusions,'"** the instructor wrote, a comment suggesting the paper had a weak conclusion, though no points were taken off for it. She also wrote, **"Several pieces of data on your cultural assessment sheets could have been included as additional support for your findings,"** though no examples were provided and no points were taken off. It seems that some of the weaknesses of Finda's paper may have been overlooked because of the amount of research that she had done, suggesting the importance given to research in the field of nursing.

Clinical Thinking Worksheets

The Clinical Thinking Worksheets (CTW's) are based on the students' clinical experience; indeed, they comprise an integral part of it. They are a written document of the work nursing students are learning how to do in the clinical setting. They require students to assess and analyze their client, both the physiological and psychosocial modes, determine appropriate nursing diagnoses, and design and evaluate intervention plans.

Students are introduced to the clinical experience and to the CTW towards the end of their first semester in the program. The first clinical experience spans a two-week period, one day each week. Three students are assigned the same client, but spend time with the client on different days. After the first week, during which students focus on the physiological assessment, students complete the first part of the CTW. In class, the instructor goes through the form and explains what information to put where.

Students share the information they obtained in clinical with their classmates who were assigned the same client, and complete or revise parts of their own assessment. Such a collaborative process indicates the value attached to teamwork in the field of nursing (Parks & Maguire, 1999). Students, however, select different diagnostic categories to explore. The second week, students focus on psychosocial assessment and the process of sharing information and completing or revising parts of the CTW is repeated.

The first-semester CTW is 10-pages long and consists of the following sections: 1) Biographic Data and Major Health Care Concern; 2) Assessment of Common Stimuli Affecting Adaptation, including Culture, Family, Developmental Stage, Cognator Effectiveness, and Environmental Considerations; 3) Physiologic Mode (head-to-toe assessment); 4) Regulator Activity, including Senses, Fluids and Electrolytes, Neurological Function, and Endocrine Function; 5) Physiologic Mode–Physiologic Needs, including Oxygenation, Nutrition, Elimination, Activity and Rest, and Protection; 6) Psychosocial Modes, including Self-Concept, Interdependence, and Role Function Modes; 7) Analysis of Data, including Data Clustering; 8) Category Exploration, including Physiologic and Psychosocial Categories and Prioritizing; 9) Second Level Assessment, including Diagnostic Category, Behaviors Reflecting Category, Focal Stimulus, Contextual Stimuli, Residual Stimuli, Theory/Knowledge, and Nursing Diagnosis; and 10) Nursing Care Plan, including Goal, Expected Outcomes, Intervention Strategies, Theoretical Rationale, Evaluation of Outcomes, Intervention Effective, and Future Planning/Replan. Each category is evaluated with either: 1 (data missing, lacks clarity), 2 (data present, clear, organized), or 3 (data present, organized,

focuses on client needs).

First-Semester CTW: Finda. Due to limitations of space, the discussion of Finda's first-semester Clinical Thinking Worksheet will be limited to the types of written feedback she received from the instructor, which is the most important source of input into the process of learning how to complete CTW's. The types of written feedback have been coded and are placed into parentheses. (See Appendix A for complete list of types of instructor feedback.) When the instructor's comments or Finda's writing contained common nursing symbols, the words have been written out in full and placed in brackets. In addition, the instructor's comments have been put into bold-face print and, for contrast, Finda's writing italicized.

Over half of the instructor's 77 comments on the first CTW refer to the need to add data (see Appendix B). In 25 instances, the instructor added the data for the student (DA); in 14 instances she indicated data that should be added (AD); and in one instance, she indicated the need to add subjective data (ASD). For example, under Neurological, the instructor wrote: **"nervousness?** (AD) ...**tremor of leg during dressing change** (DA)...**sensation in extremities?** (AD)...**memory** (AD)... **hx [history] anxiety** (DA)." On the CTW feedback form, in response to Physiologic Mode (head-to-toe assessment), the instructor circled "Subjective" for the criteria "Subjective and objective data for each body system included" and wrote: **"expand here."** At the end of the section on Psychosocial Modes, the instructor wrote: **"continue to expand data collection in categories. Incorporate subjective data whenever possible to expand your data base. Nice job on psychosocial modes!"** Although the instructor directed the student to include more subjective data, there was only one specific

comment regarding subjective data in the body of the CTW itself: Under Behaviors Reflecting Category for the Diagnostic Category: Impaired Social Interaction (Psychosocial Mode), the instructor added several behaviors, including **"subjective statements?"**

Three of the instructor's comments regard the need to add theory (AT) or change theory (CT). For Developmental Stage, Finda wrote: *"Integrity vs. Despair"* and identified the theorist as *"Erickson."* The instructor drew a bracket next to "Erickson" and wrote: **"What are tasks associated [with] this stage?"** (AT), indicating the need to provide more theoretical information. Under Theory/Knowledge for the Diagnostic Category: Risk for Injury (Physiologic Mode), Finda provided citations to theory about dyspnea, rather than theory relevant to the diagnostic category. The instructor responded: **"Theory R/T [related to] injury rather than dyspnea"** (CT), indicating the need for Finda to find theory relevant to the diagnostic category of Risk for Injury.

Five comments from the instructor refer to the need to add diagnoses (DIA). In all instances, the instructor provided the diagnoses. For example, for Nursing Diagnosis Reflecting Physiologic Mode, Finda wrote: *"Risk for injury r/t [related to] SOB [shortness of breath] with intense activity"* and *"Risk for injury r/t Pain, [due to] compression fractures."* The instructor added: **"R/T... impaired mobility (muscle weakness) & activity intolerance... presence of environmental hazards... sensory-perceptual"** (DIA).

Four comments from the instructor refer to the need to add interventions (AI). In all instances, the instructor indicated the specific intervention strategy to be added. For

Intervention Strategies for the Goal: "to increase client interaction with others" (Psychosocial Mode), the instructor wrote: **"Discuss benefits of social interaction"** (AI) and **"Explore ways to continue interaction while hospitalized"** (AI).

Ten instructor comments respond to Finda's analysis: three comments about the need to add analysis (AA); seven comments about the need for Finda to reconsider her response (RR). For Expected Outcomes for the Goal: "Client will be free of injury" (Physiologic Mode), Finda wrote: *"Ct. will rate pain between 2-3 at the scale of 1-10."* The instructor responded: **"consider how this will impact goal"** (AA), indicating the need for additional analysis. She also wrote: **"good"** (P), the one instance of a specific comment of praise in the CTW itself. For the Focal Stimulus for the Diagnostic Category: Impaired Social Interaction (Psychosocial Mode), Finda wrote: *"Pain [due to] to compression fracture."* The instructor drew a line through this and wrote: **"activity intolerance ([due to] COPD [chronic obstructive pulmonary disease]... CHF [compound hip fracture], fractures),"** indicating the need for Finda to rethink and reanalyze her response (RR).

Four instructor comments clarify the task (TC), indicating Finda had not understood what was requested or had not completed all aspects of the task. For example, for Category Exploration, the instructor circled: "1, 2, 3" in the directions: "Rank the three most important categories 1, 2, 3," and wrote: **"-continue to explore all possible categories** (TC)... **all list** (TC) " and **"–prioritize top 3"** (TC). On the feedback form, she also wrote: **"-did not complete."**

Eight instructor comments indicate the need to be more specific (S), mostly with regards to data. For Oxygenation, Finda wrote: *"Has a stage II pressure sore on Rt*

[right] posterior calf." The instructor circled *"stage II pressure sore"* and wrote: **"dimensions of wound"** (S). The instructor also wrote: **"describe wound dressing in greater detail"** (S).

Two comments from the instructor correct the student's format (F). For example, for the Nursing Diagnosis Reflecting Physiologic Mode, Finda wrote: *"Risk for injury r/t [related to] SOB with intense activity"* and *"Risk for injury r/t Pain, [due to] compression fractures."* The instructor crossed out the repeated words: "Risk for injury r/t" (F), indicating that conciseness, rather than repetition of words, is desirable on the CTW. For the Nursing Care Plan for Psychosocial Modes, Finda wrote for her Goal: *"To increase client interaction with others."* The instructor crossed out "to" and wrote: **"will"** (F), indicating that goals should be stated in terms of desired outcomes rather than intentions.

One comment praised the student (P), as already noted above.

For her summary comments for the first CTW, the instructor wrote: **"Overall a good effort on first CTW! Continue to expand data collection in categories. Incorporate subjective data whenever possible. Incorporate meds into categories. Look for relationships among stimuli & behaviors and continue to distinguish them. Theory should support data in second level assessment. Keep up your good work."** For her Clinical Self-Evaluation, Finda wrote under the category Critical Thinking in CTW: *"Data analysis was of no problem to to [sic] me. My most difficult aspect was the 2nd level assessment."*

Second-Semester CTW's: Finda. The content and format of the Clinical Thinking Worksheets for the second-semester courses, Nursing Management of

Clients I and II, are essentially the same as for the first semester, with some additional descriptive categories provided for the three Psychosocial Modes. For Self-Concept Mode: Physical Self and Personal Self were added; for the Interdependence Mode: Significant Others and Support System; and, for Role Function Mode: Primary, Secondary, and Tertiary Roles.

The Analysis of Data section is also somewhat different, complicating the transition for students from the 1st-semester CTW to 2nd-semester CTW's. Instead of asking students to cluster ineffective behaviors or stimuli, students are asked for each of the Modes (Physiologic, Self-Concept, Interdependence, and Role Function) to: "Summarize the integrity of each mode. (Describe the adaptive &/or ineffective responses. Also, explain the dynamics of the ineffective response using theory and norms i.e., underlying pathophysiology, mode theory, etc. Begin to look for patterns here.)" In addition to Category Exploration, students are asked to list Significant Collaborative Diagnoses, such as: "potential complications of: medical diagnosis, treatments, evaluation procedures, intervention procedures." They are also told to attach the information they had prepared for clinical about their assigned patient's diagnosis and their daily plan for the clinical itself, and provide information about the medical diagnosis, lab results, and medications.

The CTW's are made available on-line, so students can word-process their reports and send them to their instructor electronically. Word-processing, however, did not always expedite matters. In an interview at the end of the second semester, Finda said the most difficult aspect of the CTW assignments was the amount of time it took to complete them, especially because they were supposed to be word-processed and she

was a very slow typist. She also had a young child at home who needed periodic attention. At one point in the semester, the instructor dropped the requirement for Finda that the CTW's be word-processed, though, in fact, Finda word-processed four of the CTW's.

The following discussion focuses on the series of CTW's that Finda wrote during the second semester in the nursing program. The system of scoring CTW's second semester consists of a 4-point scale: 0=Unacceptable, 1=Needs Improvement, 2=Satisfactory, 3=Good, and 4=Superior. In contrast to the first-semester CTW, scores are not necessarily given for each category of information, but rather are based on specific evaluation criteria, which may span several sections. Finda showed progress in a number of ways on the CTW's she completed Winter semester, as illustrated in the following sets of examples that were taken from different CTW's. Each set consists of two examples taken from the same category or subcategory of information, one that received a score of either a 1 or 2; the other that received either a 3 or 4. No instances of 0 were noted in the scoring of Finda's CTW's.

The first category, Data Collection, is evaluated by the "complete and accurate assessment of common stimuli affecting adaptation," including Culture, Family, Developmental Stage, Cognator Effectiveness, and Environmental Considerations. For the **first** CTW, Finda had a client who was nonverbal, which her instructor recognized: **"I realize he was a challenge to get information from."** However, there was missing information that Finda could have gotten from other sources. For the section Developmental Stage, which includes: "age, sex, tasks, hereditary and genetic factors," Finda wrote: *"95 year old male. Depends on daughter for cares at home."*

The instructor added: **"Erickson's stage of development."** For the section Cognator Effectiveness, which includes: "perception, knowledge, skill," Finda wrote: *"has history of dementia, DNR/DNI (requested by daughter)."* The instructor added: **"Education level."** Finda received a 1-2 for Data Collection.

By the **fifth** CTW, Finda provided more complete and comprehensive information for Data Collection. For Developmental Stage, she wrote: *"45 year old female… Erickson stage of development. Task; generativity vs stagnation; client is happy with her achievement but regrets her past experience. She has family history of thyroid disease."* For Cognator Effectiveness, Finda wrote: *"Has two years associate degree in recreational therapy, has knowledge in crafting and does it at home to earn extra income, she also claimed of have written a book in teaching how to do craft, and hope to publish it very soon. Has music lessons and sang in her church. She is able to call for help when she's is [sic] in pain or uncomfortable. She has both short term and long term memory. And she is a reliable source."* Finda received her first 4 for Data Collection on this CTW.

For Assessment of Modes, Finda had more difficulty with the assessment of Psychosocial Modes than with the Physiologic Mode. She received 3's from the beginning of the semester for Physiologic Mode, but 2's for Psychosocial. In an interview at the end of the semester, Finda confirmed that she had more difficulty with the Psychosocial. For Interdependence Mode, on her **second** CTW, which includes giving/receiving behaviors, Finda wrote for Significant Others: *"has medicare insurance, lives with step father. Youngest son lives with her daughter. Oldest son in child [sic] in jail, has a grand child."* For Support System, which includes

giving/receiving behaviors, Finda wrote: *"Has medicare, says her boyfriend works part time and help her out some times. Is on government assistance, Welfare. Oldest daughter takes care of her brother. Does not have an advance derictive/durable of attorney for health care."* She received a 2+ for this section; the instructor did not write any comments.

In contrast, for Significant Others on her **fifth** CTW, Finda provided significantly more information, including subjective data and a quote from the client. She wrote:

> *She has three children and two grandchildren. And that she and her children have a very closed [sic] relationship. However, she had been married three times and did not feel comfortable to talk about her past relationships. She states she is very happy with her boyfriend and had known boyfriend for three years, that boyfriend took off from work to take care of her for the past year. "In case he died before me I will become a nun, which I had wanted from childhood." Claimed that she never had good relationship with her parents util [sic] two years ago, because she was a rebellion child. She refused to talk about her relationship with her parents, but stated that that she missed them very much and began to cry.*

For Support System, Finda also wrote substantially more, including subjective data and specific details:

> *She claimed that she goes to support group once a week to talk about feelings, and also see therapist when she is not feeling good. She talked to close friends and go to church. She gets subsidise [sic] from the government for her rent (Section A), she gets extra money to buy food*

and other things. She has Medicaid insurance and she lives on disability. Her boyfriend takes care of her at home. She is very pleasant if she is not agitated, says please and thanks when giving her care. She does crafts at home to get extra income and she states that that she loves to do it.

In response, the instructor wrote: **"Nice work."** Finda received her first 4's for Psychosocial Assessment on this CTW.

Finda also had some difficulty with Data Analysis. She stated in an interview at the end of the semester: "The most difficult part [of the CTW] I found was to analyze the various modes... you have to incorporate theory into your data... the physiological aspect... was not that hard for me... the role function... the psychosocial aspect of it was kind of hard... I couldn't find theories to back it up or maybe I didn't look too well." The criteria for evaluating Data Analysis are: "Theory base in depth and appropriate" and "Accurate summary of integrity of mode." For her analysis of the client's Interdependence Mode on the **second** CTW, Finda provided incomplete information and no theory. She wrote: *"This mode is adaptive because, step father takes care of client. Cook for her and she and her boyfriend live with step-father. She has health insurance, receives assistance from the government. She is receiving, makes this mode adaptive. And also has some form of support. The ineffectiveness of this mode is she is not giving behavior. She is more dependent on others than what she is receiving."* Her instructor wrote: **"Yes & she is not give/take [with] her children which would be a consideration."** Finda did not provide any theory for this mode (or for any of the other modes of assessment, physiological and psychosocial). She received a 1 for theory and a 2+ for her summary.

In contrast, for her analysis of the Interdependence Mode on the **fifth** CTW, Finda wrote considerably more and provided relevant theory, although it was not correctly cited. She wrote:

> *The interdependence mode of my client is also adaptive based on the following data: She has good relationship with her children, and grandchildren, she loves friends and usually invite them for dinner, she is happy with boyfriend, she lately made peace with her parents before they died. According to the Roy model, the purpose of this mode is to achieve affectional adequacy. Which I think is the focus of this client. Kozier and others also state that, through social interaction with significant others one developes [sic] attitudes toward onself [sic].*

For the complete analysis of the physiological and psychosocial modes, Finda made reference to theory eight times from four different textbooks. She received her first 4's for both theory and summary; the instructor wrote: **"Nice work [with] your analysis."**

The next section, Category Exploration, is evaluated for: "Appropriate prioritization of categories" and "Significant collaborative diagnoses identified." Finda received 3's fairly consistently throughout the semester on this section. For the first part, students are asked to "List all actual and potential diagnostic categories identified from the data" and then "*Prioritize* by indicating the three most important categories." On her third CTW, Finda only listed the three most important categories; the instructor wrote: **"Any other actual or potential diagnostic categories?"** She received a 2 for this part. For the second part, students are supposed to list: "potential complications of: medical diagnosis, treatments, evaluation procedures, intervention procedures."

For all CTW's except Finda's second, the instructor added to her list of Significant Collaborative Diagnoses. For the second CTW, Finda's list was comprehensive; no additional diagnoses were added and she received a 4 for this part.

The section on Assessment of Physiological and Psychosocial Categories is evaluated using the criteria: "identifies focal...contextual...residual stimuli," "data reveals appropriate behavior" and "data's theory base complete and in depth." Separate scores are given for physiological and psychosocial categories, in contrast to the 1st-semester CTW, in which scores for both categories are combined. Finda received 2's, 3's, and some 4's in this section throughout the second semester. In other words, she did not make clear progress from 2's at the beginning of the semester to 4's at the end. The following examples are taken from both physiologic and psychosocial diagnoses.

For the Diagnostic Category: Impaired Verbal Communicator (Psychosocial Category) on her **first** CTW, Finda wrote as the Focal Stimulus: *"Activity intolerance secondary to hemiparesis, demantia."* The instructor responded: **"I'm not sure how this fits [with] dx [diagnostic] category."** Finda received a 2. Clearly, her focal stimulus was not relevant to the diagnostic category.

In contrast, on the **fourth** CTW, for the Diagnostic Category: Altered Family Process (Psychosocial Category), Finda wrote for the Focal Stimulus: *"Alcoholism,"* a focal stimulus that was consistent with the diagnostic category; she received a 4.

For Contextual Stimuli for the Focal Stimulus: "altered role function" (Psychosocial Mode) on the **second** CTW, Finda wrote: *"cirrhosis... anemia... thrombocytopenia... CHF... alcoholic hepatic... pyelonephritis...chronic pulmonary*

HTN." The instructor drew a line through all of these responses and wrote: **"cirrhosis... hx [history] of chemical use... multiple physical dx [diagnoses]... weakness... some confusion... son in jail... challenged financial status... 2 husbands died."** Finda received a 1 for this section; clearly her contextual stimuli did not fit the focal stimulus, but no written feedback was provided that might have explained why not.

In contrast, for Contextual Stimuli for the Focal Stimulus: "urosepsis, rt. [right] toe ulcer" (Physiologic Mode) on the **third** CTW, Finda wrote: *"urosepsis... syncope... h/s [history] pulmonary edema... h/s cva... type II diabetes mellitus... Triamcinolone."* The instructor added: **"catheter – weeks/months, years"** and gave her a 4.

For the Residual Stimuli for the Focal Stimulus: "urosepsis, rt. [right] toe ulcer" (Physiologic Mode) on the **third** CTW, Finda wrote: *"poor hygiene? poor nutrition? Lack of self care?"* The instructor added: **"What are cares at NH [nursing home]... Does he get out of bed there?"** Either the missing information for Residual Stimuli was more critical than for Contextual Stimuli or inconsistent criteria was applied in the evaluation of these two categories. Finda received a 2 for this section.

In contrast, for Residual Stimuli for the Focal Stimulus: "Alcoholism" on the **fourth** CTW, Finda wrote: *"family history of alcohol abuse? Childhood abuse? Level of education? Poor nutrition... low financial status? Lack of family support? Frustration? Low self-esteem."* The instructor added: **"? Able to read/write"**; she also wrote: **"Good thinking here."** Finda received a 4 for this section.

For Behaviors Reflecting Category for the Diagnostic Category: Impaired Skin Integrity (Physiologic Mode) on the **third** CTW, Finda wrote: *"has rt. [right] toe ulcer...*

rashes on extremeties and groan areas… rt. Hemiparesis… Type II diabetes… flaky skin, or dry skin… h/s [history] perineal abcess… glucose 212, 147… WBC 11.7…has h/s pulmonary edema… uses nystatin… takes vit c… Lisinopril… Triamcinolone… urea nitrate 28." The instructor responded: **"Finda – most of these are contextual stimuli. The first colume is for behaviors as in – ex. Able to sit in chair I Hr… Bears [no] wt [weight] [with] transfer… Washes Hands when given soapy wash cloth… Eats 100% of food."** Clearly, Finda was confused between behaviors and contextual stimuli; the instructor's response attempted to clarify the task. For this section, Finda received a 1.

In contrast, for the Behaviors Reflecting Category for the Diagnostic Category: Altered Family Process (Psychosocial Mode) on the **fourth** CTW, Finda wrote: *"Homeless… No good relationship [with] family… been divorced for 4 years… have no emergency contact… Been alcoholic for 23 years… no teeth in mouth… does not hear in Rt [right] ear… was unable to read and write upon admission… poor appearance for age… on watch for alcohol withdraw symtom [sic]."* The instructor wrote: **"Yes"** and underlined it; Finda received a 4 for this section. Clearly, the information provided here were behaviors that were appropriate for the diagnostic category.

For the section on Theory/Knowledge, students are asked to "explain significance of behaviors, environmental stimuli, and contextual stimuli; concerns/issues suggested by the theory & data; further data collection suggested…(source)." Finda received mostly 3's from the beginning of the semester and a few 4's for this section. However, for the second CTW, she received a 2. For

the Theory/Knowledge for the Diagnostic Category: Altered Family Process (Psychosocial Mode) on the **second** CTW, Finda wrote: *According to Kozier and others, 1998, 'situational or maturational crisis; physical abuse; declined in physical strength or ability; lack of adequet [sic] role model; inadequate resources or social supports; cultural transition' (p. 813).* Finda provided some relevant information, citing appropriately from a textbook, but she did not make the connection to the behaviors or stimuli already noted. She received a 2, but the instructor did not write any comments.

In contrast, on the **fourth** CTW, Finda wrote for the Theory/Knowledge for the Diagnostic Category: Alcoholism (Psychosocial Mode):

> *According to Kozier and others "chronic drinking has major effects on all body systems, causes progressive liver and kidney damage, damages stomach and related organs, and slows mental response frequently leading to accidents and deaths. Excessive alcohol can have a toxic effect on the intestinal mucosa, thereby decreasing the absorption of nutrients. (p. 657-658). Black and Matassarin also states that alcohol is classified as a CNS depressant that affects all levels of the brain, and depression of the respiratory system, cardiac functioning or temperature regulation occurs." This may lead to COPD, pneumonia, etc. (p. 248).*

Finda referred to two sources, which she quoted rather than paraphrased, and related the theory to the contextual stimuli of COPD and pneumonia. She received a 4 on this section.

The Nursing Diagnosis includes the diagnostic category, already noted previously, and multiple etiologies. This section is evaluated for: "multiple etiologies,"

"nursing focus," and "accurately reflect client." Separate scores are given for physiologic and psychosocial categories; the following examples are taken from both physiologic and psychosocial diagnoses. Overall, Finda received mostly 3's and 4's and a few 2's for this section. For the Nursing Diagnosis on the **first** CTW, Finda wrote: *"ineffective airway clearance r/t [related to] Tracheobronchial infection, non-productive coughing"* (Psychosocial Mode). The instructor responded: **"should be client specific"** and added: **"bed rest, [decreased] level of consciousness."** Finda received 2 for "Multiple etiologies," 3 for "Nursing focus," and 2 for "Accurately reflect client."

In contrast, for the Nursing Diagnosis on the **third** CTW, Finda wrote: *"Impaired social interaction r/t [related to] difficulty in speaking limited mobility secondary to rt. [right] sided hemiparesis, h/s [history] of SobB, h/s pulmonary edema, urosepsis secondary to supra pubic foley catheter"* (Psychosocial Mode). The instructor circled "multiple etiologies" in the directions and wrote: **"Yes."** She also wrote: **"Good"** at the end and underlined it. Finda received 4's for all categories of evaluation.

The next major section of the CTW is Nursing Care Plan. The categories of evaluation for the first subsection, Intervention: Goals and Criteria, are: "Goals relate to chosen category," "Goals stated in client terms," "Outcome criteria related to goal," and "Outcome criteria are specific and measurable." For this section, Finda received the full range of scores throughout the semester. On the first CTW, Finda she received both 2's and 1's.

Under Nursing Care Plan for Physiologic Mode on the **first** CTW, Finda wrote as her Goal: *"client will have effective airway clearance."* For Expected Outcomes,

she wrote: *"client will identify two ways to improve effective airway clearance,"* to which the instructor responded: **"How?"** Finda also wrote: *"Establish a normal respiratory pattern."* Finda received 2 for "Goals relate to chosen category," 1 for "Goals stated in client terms," 2 for "Outcome criteria related to goal," and 1 for "Outcome criteria are specific and measurable." For the Outcome criteria "specific and measurable," Finda never received a 4; she received mostly 1's and 2's throughout the semester. For the fifth CTW, however, she received a 3.

Under Nursing Care Plan for Physiologic Mode on the **fifth** CTW, Finda stated as her Goal: *"patient will be freed of pain."* For the first Expected Outcomes, she wrote: *"patient will verbalize pain level on the scale of 0-10 during hospital stay."* The instructor drew a line from the word "level" and wrote: **"at what."** For the second outcome, Finda wrote: *"patient will verbalize a time for rest during my shift."* For the third outcome: *"patient will demonstrate one method to alleviate pain,"* to which the instructor responded: **"What will you do for this."** Finda received 3 for "Goals relate to chosen category," 4 for "Goals stated in client terms," 4 for "Outcome criteria related to goal," and 3 for "Outcome criteria are specific and measurable."

For Intervention: Plan, the categories of evaluation are: "Describes comprehensive intervention plan," "Provides rationale for particular intervention," "Reflects uniqueness of client/situation," "Aims at altering stimuli," and "Relates to theory base." For this section, Finda received mostly 2's and 3's, with no noticeable improvement from one CTW to the next.

For the **first** CTW, for Intervention Strategies, Finda wrote for her Plan: *"Provide and teach client on to improve airway clearance"* (Physiologic Mode). For the

Implementation of the Intervention Strategies, she wrote: *"Encourage productive coughing and deep breathing. Assess for excess secretions in mouth, monitor vital signs and stress level of client and document. Also sunction [sic] and remove secretions."* The instructor wrote: **"Yes."** For the second intervention, Finda wrote: *"Assess for pain and anxiety in patient. Reposition client every two hours, encourage relaxation for client. And administer medication ordered."* The instructor also wrote: **"Yes"** next to this intervention. Her overall comments were: **"List interventions for each outcome. Under that, list your actual implementation... Your plan & what you do could vary."** During a conference with the instructor, Finda wrote next to Implementation: *"what you did."* She also drew a line from the title of the section Intervention Strategies and wrote: *"what you should do."* Finda had consistent difficulty with this aspect of her CTW: distinguishing between the planned and actual implementation of her intervention strategies. She received 2+ for comprehensive intervention plan.

On the **fifth** CTW, for Intervention Strategies, Finda wrote for her Plan: *"control pain and promote comfort level for patient"* (Physiologic Mode). For Implementation of the Intervention Strategies, Finda wrote: *"Assess patient pain level every hour... take vital signs pm... assess patient comfort level... administer medication in a timely manner as ordered."* The instructor wrote: **"Each outcome should have one or more plans & the what [sic] you actually did (your implementation)."** Finda continued to have difficulty with this aspect of the CTW. She received 3 for comprehensive intervention strategy.

For Theoretical Rationale for the Nursing Care Plan (Physiologic Mode), or the

"theory and knowledge to support choice" on the **first** CTW, Finda wrote: *"Reducing stress will decrease anxiety in the patient. Anxiety poses stress which make the client to be vulnerable to infection and less activity level. Less stress help the client to conserve energy that will enable him to breath easily."* For her second paragraph, Finda wrote: *"Pain and improper positions may cause hypoventilation. Reposition client every two hours. Medications can increase ventilation and air flow."* She received 3 for "Provides rationale for particular intervention," 2+ for "Reflects uniqueness of client/situation," 3 for "Aims at altering stimuli," and 2+ for "Relates to theory base." The instructor did not write any comments.

On the **fifth** CTW, for Theoretical Rationale for Nursing Care Plan (Physiologic Mode), Finda wrote: *"According to Doenges and others (1997) 'pain is often diffuse, severe and unrelenting in acute or hemorrhagic pancreatic… Bed rest decreases metabolic rate and Gi stimulation, secretions, thereby reducing pancreatic activity… Relaxation enables patient to refocus attention, may enhance coping… Severe or prolong pain can aggravate shock and is more difficult to relieve (p. 484).* Finda received 3 for "Describes comprehensive intervention plan," 2 for "Provides rationale for particular intervention," 2 for "Reflects uniqueness of client/situation," 3 for "Aims at altering stimuli," and 4 for "Relates to theory base."

For the rest of Nursing Care Plan, no scores were given which correspond directly to the remaining sections: Evaluation of Outcomes, Intervention Effective, and Future Planning/Replan. There were also virtually no instructor comments for these sections either. Thus, there was no way to determine the accuracy and/or improvement of Finda's work in these areas throughout the semester.

Data Analysis

Written comments from the instructors were coded and tabulated to see if there were patterns that emerged in their responses to the six Clinical Thinking Worksheets (CTW's) that were analyzed for this study (see Appendix C). In addition, Finda's scores on the second-semester CTW's were analyzed to see if any patterns emerged. Finally, the instructor's summary comments, both at the end of sections and at the end of the CTW's were categorized into Praise and Needs Improvement (see Appendix D) and analyzed for patterns.

Results of Study

Finda made substantial improvement in most areas of her CTW's, as evidenced from an analysis of instructor feedback, both specific and summary comments, and her scores. She improved in her collection of data and her use of appropriate data in her assessment of the client, particularly from her first CTW Fall semester. She also improved in her analysis of data and in her use of relevant theory to inform her analysis and support the development of a nursing diagnosis. She also improved in her writing of measurable outcomes, though she continued to have difficulty distinguishing between intervention strategies and their implementation. The form, however, that Finda used did not distinguish between these two aspects of intervention strategies, though the instructor reported having explained this several times to her clinical group as well as to Finda individually; Finda tended to report what she planned on doing, rather that what she actually accomplished. On five of the worksheets, the instructor either commented on this point or wrote in examples of possible interventions, but without much impact on the subsequent CTW. Finda also reported that instructors

differed as to whether they wanted this distinction made. Another instructor, according to Finda, did not insist upon it.

Finda reported never having gone to an instructor's office first or second semester specifically to ask questions about any material or assignment she did not understand. She preferred to figure it out on her own or seek out assistance from a classmate. However, given the nature of clinicals and the close working relationship between nursing students and their clinical instructor, there are many opportunities during clinicals to informally ask questions about CTW's. Indeed, her clinical instructor reported having sat down several times with Finda to explain her feedback on the CTW's, though she couldn't remember where those meetings had taken place--in her office or in the hospital. Finda's written comments on her first CTW regarding the difference between intervention strategies and its implementation were noted during a conference with the instructor, indicating that at least one such conference had taken place.

It is clear from an analysis of Finda's CTW's that progress is not necessarily linear from the first CTW to the last, but rather some skills may take multiple applications with various clients to understand how to do it correctly. This is consistent with Spack's finding in her study (1997) of the need for "continual practice" (p. 47). Riazi (1997) also found in his study that: "Participants gained knowledge of their disciplinary genres over their long-term interaction with students, professors, ideas, and rhetorical forms" (p. 132). Some weeks Finda had more time to devote to her CTW than others. If she had a test that week, for example, the CTW was not given priority. Thus, differences between CTW's from one week to the next are not

necessarily a result of changes in the student's mastery of the genre, but could be due to contextual factors or constraints on the learning situation.

It is also clear from the analysis of instructor feedback and scores that there is not necessarily a one-to-one correspondence between the presence of feedback, either positive or negative, and the score given. Indeed, instances were found where the student received a 1 or 2 for the section, but there was no feedback; likewise, there were instances where the student received a 4, but the feedback given seemed to indicate less than superior work. Written comments and feedback are significant ways of conveying the expectations and requirements of discipline-specific literacy (Riazi, 1997). In addition, students will more likely refer to written feedback in preparing subsequent CTW's than rely on faulty memory of oral encounters. Discipline-specific literacy is more easily acquired, especially for second-language students, when expectations and the extent to which a student has fulfilled those expectations are made as explicit as possible.

With respect to the Cultural Assessment assignment, Finda indicated difficulty with some aspects of acquiring discipline-specific literacy, although she received the maximum number of points for her paper: She needed to learn how to condense information, rather than to expand upon it. On the other hand, she realized the importance of research and provided much more than the required amount of outside sources, for which she was rewarded. She also noted various idiosyncrasies in directions given by different instructors; different requirements were also evident in the various tasks students were expected to complete. Learning how to succeed in the academy is not just "whether students adopt particular discourse practices," but also

"how productively they can negotiate their way through diverse discourses" (Spack, 1997, p. 51.) Thus, on the one hand, students may need to expand upon their analysis of interview data in one assignment, the more traditional cultural assessment assignment, but for the CTW, they may need to summarize and analyze data collected for the purpose of selecting one diagnostic category to explore for the intervention plan.

Thinlay encountered a few difficulties, as well, with the Cultural Assessment assignment, even though she received close to the maximum number of points for her paper. Some aspects of her writing could have been improved, including: greater integration of interview data and outside sources, a more effective conclusion, and more accurate editing of errors. In addition, an analysis of Thinlay's process of completing the assignment indicates several areas of difficulty: ineffective reading strategies applied for large quantities of reading; ineffective search strategy, at least initially; failure to follow the prescribed order in which to complete the assignment; and difficulty with time management, resulting in ineffective use of resources at the editing stage. Because Thinlay has only participated in the study for one semester, it is not possible to describe the progress she made in her Clinical Thinking Worksheets; it will be interesting to follow her progress the second semester.

Conclusion and Implications

In conclusion, there is much to be learned from a longitudinal study of how second-language students learn to write successfully in a B.S. degree nursing program. Preliminary findings at the end of the first year of this study suggest the importance of clear and consistent guidelines for assignments, handouts and explanations that break down tasks into manageable chunks, a process approach that

allows for extensive written comments and feedback from instructors and input from classmates, explicit criteria for evaluation, and repeated practice of new genres in a variety of contexts.

The findings of this study can be used to develop coursework and/or supplemental instruction for second-language students who have difficulty developing proficiency in new nursing genres, such as the Clinical Thinking Worksheet and Progress Notes. Although Finda had difficulty with some aspects of the CTW's, overall she had successfully mastered the genre by the end of the second semester. Her final grade in the course which included the medical/surgical clinical was "A." Much could also be learned from analyzing a student's CTW's who was unable to develop such proficiency and who did not satisfactorily progress in the program.

Appendix A
Categories of Instructor Feedback
Clinical Thinking Worksheets

DATA
DA (Data added by instructor)
AD (Add data)
ASD (Add subjective data)

THEORY
AT (Add theory)
CT (Change theory)

DIAGNOSIS
DIA (Diagnosis added by instructor)
ADI (Add diagnosis)

INTERVENTION
AI (Add intervention)
AR (Add resources)

ANALYSIS
AA (Add analysis)
RR (Rethink response)

OTHER
TC (Task clarified by instructor)
C (Clarify)
S (Specify)
F (Format)
CO (General comment)
P (Praise)

Appendix B
Analysis of Instructor Feedback
Clinical Thinking Worksheet - Semester 1 (Finda)

CATEGORY OF FEEDBACK		NUMBER OF COMMENTS
DATA		
DA	(Data added by instructor)	25
AD	(Add data)	14
ASD	(Add subjective data)	1
THEORY		
AT	(Add theory)	1
CT	(Change theory)	2
DIAGNOSIS		
DIA	(Diagnosis added by instructor)	5
INTERVENTION		
AI	(Add intervention)	4
ANALYSIS		
AA	(Add analysis)	3
RR	(Rethink response)	7
OTHER		
TC	(Task clarified by instructor)	4
S	(Specify)	8
F	(Format)	2
P	(Praise)	1
	TOTAL NUMBER OF COMMENTS:	**77**

Appendix C
Analysis of Feedback
Clinical Thinking Worksheets (Finda)

Type of Feedback	1st sem CTW	2nd sem Wk #1	2nd sem Wk #2	2nd sem Wk #3	2nd sem Wk #4	2nd sem Wk #5
DA	25	2	10	3	3	3
AD	14	7	13	2	4	-
ASD	1	-	-	-	-	-
AT	1	-	3	3	-	-
CT	2	-	-	-	-	-
DIA	5	1	1	-	-	6
ADI	-	3	-	2	1	-
AI	4	-	-	3	-	-
AR	-	-	-	6	-	-
AA	3	-	2	-	2	-
RR	7	1	8	2	8	4
TC	4	3	10	2	-	1
C	-	2	4	1	3	1
S	8	3	1	3	-	2
F	2	-	-	-	-	-
CO	-	2	4	1	3	1
P	1	7	17	5	4	2

Appendix D
Analysis of Summary Comments
Clinical Thinking Worksheets (Finda)

PRAISE	NEEDS IMPROVEMENT
1st semester	
Nice job of psychosocial modes	Expand data collection (2) Incorporate subjective data (2) Incorporate meds into categories Look for relationships among stimuli & behaviors Distinguish stimuli & behaviors Theory should support data
2nd semester, Week #1	
Nice assessment Nice use of details Nice attempt at analysis Incorporated theory in outcomes and interventions	Include theory and cite theory for Physiologic Assessment
2nd semester, Week #2	
Good assessment of common stimuli affecting adaptation; nice use of examples. Great improvement.	
2nd semester, Week #3	
Nice assessment of physiological needs Noted improvement incorporating theory with analysis	Writing measurable outcomes
2nd semester, Week #4	
Nice use of theory throughout Nice work with analysis & incorporating theory	
2nd semester, Week #5	
Nice work with your analysis	

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